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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,719	03/27/2006	Rosenfeld Josi	GB03 0167 US1	2184

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
370 W. TRIMBLE ROAD MS 91/MG
SAN JOSE, CA 95131

EXAMINER

LIU, HARRY K

ART UNIT	PAPER NUMBER
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3662

MAIL DATE	DELIVERY MODE
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03/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,719	Applicant(s) JOSI, ROSENFELD	
	Examiner HARRY LIU	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/26/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 7-11, 14-16, 18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-11, 14-16, 18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of applicant's amendment filed (12/26/2007). Claim(s) (4, 6, 12-13, 17, 19) has been canceled without prejudice. Claims (1-3, 5, 7-11, 14-16, 18 and 20-22) are pending and an action on the merits is as follows.

Applicant's arguments with respect to claims (1 & 14) have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 10-11, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (2002/0025011) in view of Webster (2001/0036223).

Regarding claims 1, 10-11, 14, Sullivan discloses method/apparatus - of position determination in a radio system, the method comprising:

- multiplying a signal received -by a multiplier with a carrier signal from a carrier generator (article 112) to form a mixed down signal (multiplier 108 in FIG. 1 below);
- correlating the mixed down signal with a replica signal from a code generator to form a correlated signal (Gold code generator 114);

- processing the correlated signal with an optimization function to form an output signal (article 116, 118);
- feeding back the output signal to control the carrier generator and the code generator for improving accuracy of the position measurement (DSP 118, paragraph 0007, 0013, 0015), DSP is a computer product and program itself.

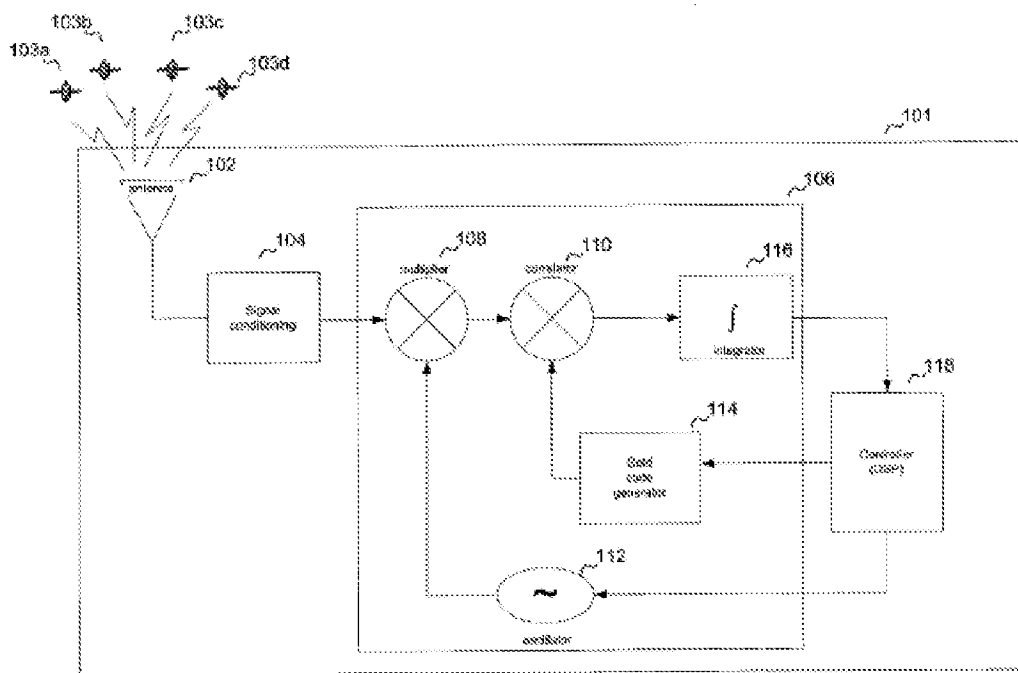
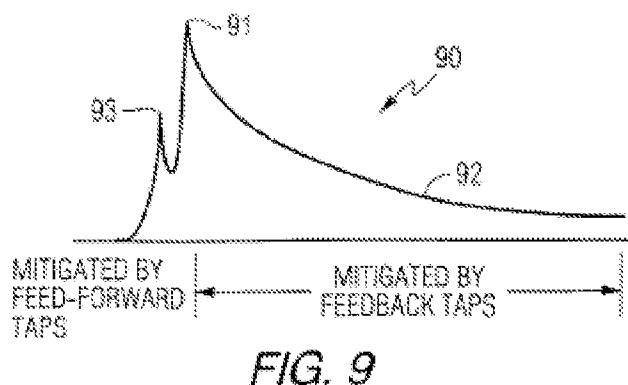
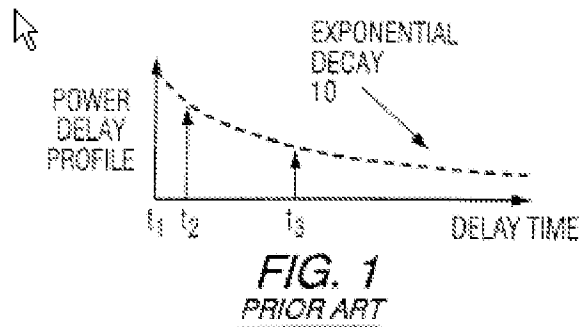


FIGURE 1
(PRIOR ART)

Sullivan does not specifically disclose the position measurement will be used for indoor environment or optimization function comprising an exponential term in combination with a second term form an output signal. However, Webster teaches rake receiver, indoor multipath has characteristics of exponential power decay (paragraph 0041 & FIG. 1, FIG. 9 below), ISI or bleed-over. It would have been obvious to modify Sullivan with Webster by incorporating claimed features in order to get more accurate

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calculation in indoor environment. Note that in order to filter out the multipath signal; it is needed to do further process with a second term to locate the real signal.



3. Claims 2-3, 5, 7-9, 15-16, 18, 20, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (2002/0025011) in view of Webster (2001/0036223) and further in view of Josi (WO 03/019826).

Sullivan, as modified with Webster, disclose all claim limitation except for the following features in the corresponding claims. However Josi teaches all the features, it would have been obvious to further modify Sullivan with Josi by incorporating claimed features in order to better estimate the signals in indoor environment.

Regarding claims 2-3, 15-16, Josi discloses the exponential term and the second term are in the claimed forms (see equation 1 & 9).

Regarding claims 5, 18, Josi discloses optimization function and a line of sight (direct path, claim 4) correlation function.

Regarding claims 7, 20, Josi discloses first operating a multipath mitigation technique (claim 11).

Regarding claims 8-9, 21-22, Josi discloses MEDLL and MMSE technique (page 2, line 32, page 3, line 4).

It is noted that applicant does not separately argue for the feature of other claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry Liu whose telephone number is 571-270-1338. The examiner can normally be reached on Monday -Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, please **leave a voice message** with application serial number and nature of call, a response within 24 hours can be expected during regular business days. Also, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2338.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Harry Liu/
Examiner, Art Unit 3662

March 12, 2008

/Thomas H. Tarcza/
Supervisory Patent Examiner, Art Unit 3662